

Sub E1
D3 --29. (Amended) An ink jet printing module comprising a piezoelectric element having a surface, and a thermoplastic bonding component, the thermoplastic bonding component having dimensions of a surface of a first component heat-bonded to the surface.--

D4 Sub E1 --46. (Amended) A method of manufacturing an ink jet printing module comprising:
contacting a first component of an ink jet printing module having a surface with a thermoplastic bonding component;
contacting a second component of the ink jet printing module including a orifice plate having a surface with the thermoplastic bonding component; and
adhering a peelable protector strip over the orifice plate.--

Please add new claims 47 to 65.

Sub E1
D5 *47* *50*
47. --47. (New) The method of claim 1 wherein the thermoplastic bonding component includes a plurality of openings.--

48
--48. (New) The method of claim 21 wherein the thermoplastic bonding component includes a plurality of openings.--

49
--49. (New) The ink jet module of claim 29 wherein the thermoplastic bonding component includes a plurality of openings.--

50
--50. (New) The method of claim 45 wherein the filter includes a repeating pattern of units having a plurality of openings.--

51
--51. (New) The method of claim 50, wherein a land between the units is at least 50 microns.

DS
52
~~52~~. (New) An ink jet printing module comprising a piezoelectric element having a surface, and a thermoplastic bonding component heat-bonded to the surface,

wherein the thermoplastic bonding component has a thickness between 1 micron and 150 microns.--

53
~~53~~. (New) The ink jet printing module of claim *52*, wherein the thermoplastic bonding component has a thickness between 10 microns and 125 microns.--

54
~~54~~. (New) The ink jet printing module of claim *52*, wherein the thermoplastic bonding component has a thickness between 20 and 50 microns.--

55
~~55~~. (New) The ink jet printing module of claim *52*, wherein the thermoplastic bonding component includes a first surface heat-bonded to the surface of the piezoelectric element and a second surface heat-bonded to a surface of an ink jet printing module component.--

56
~~56~~. (New) The ink jet printing module of claim *52*, wherein the thermoplastic bonding component includes an electrode pattern.--

57
~~57~~. (New) The ink jet printing module of claim *52*, wherein the piezoelectric element is lead zirconium titanate.--

58
~~58~~. (New) The ink jet printing module of claim *52*, wherein the thermoplastic bonding component includes a polyimide.--

59
~~59~~. (New) The ink jet printing module of claim *52*, further comprising an ink channel, the piezoelectric element being positioned to subject ink within the channel to jetting pressure, and electrical contacts arranged for activation of the piezoelectric element.--

60
~~60~~. (New) The ink jet printing module of claim *59*, further comprising a series of channels.--

61
~~64~~
~~61~~. (New) The ink jet printing module of claim ~~60~~⁶⁰, wherein each of said channels is covered by a single piezoelectric element.--

DB
cont
62
~~65~~
~~62~~. (New) The ink jet printing module of claim ~~59~~⁵⁹, wherein the thermoplastic bonding component covers the ink channel and includes a filter.--

Sub
E1
63
~~66~~
~~63~~. (New) The ink jet printing module of claim ~~62~~⁶², wherein the filter including a repeating pattern of units having a plurality of openings and a land between the units is at least 50 microns.--

64
~~67~~
~~64~~. (New) The ink jet printing module of claim ~~63~~⁶³, wherein the width is 300 to 495 microns.--

68 65
~~68~~
~~65~~. (New) The ink jet printing module of claim ~~52~~⁵², further comprising an orifice plate and a protector strip adhered to the orifice plate, wherein either the orifice plate or the protector strip includes a thermoplastic bonding material.--